ABSTRACT

The invention provides a searching and recording method to search a corresponding replacement block for a defect block to correctly record digital data onto an optical recording medium. When the digital data which is designated to be recorded in a predetermined block in a data area of a target data management area (DMA) is determined to be recorded in another block, inspect the detect table to find an idle recording entry in a target detect table block (DTB) corresponding to the target DMA for recording. If no spared entry in the corresponding target DTB, sequentially leapfrog around the target DTB back and forth to search in the adjacent DTB for any idle entry. Record the digital data in a replacement block corresponding to the entry in the spare area of a DMA corresponding to the searched DTB.

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